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## **From Personal to Personalized Memory**

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## FROM PERSONAL TO PERSONALIZED MEMORY

### Social Media as Mnemotechnology

*Robert Prey and Rik Smit*

in: *A Networked Self and Birth, Life, Death*. Papacharissi, Z. (ed.). Routledge, NY. p. 209-223

### Memory and Self

Mrs. de Rode was 92 years old when she appeared in the Dutch documentary *Tegen het vergeten* (*Against Forgetting*). An avid traveler for much of her life, she lived her final years in an apartment in the Dutch city of Groningen, surrounded by mementos of hundreds of journeys to near and distant lands. Travel diaries, flight tickets, maps, menus, photos, and postcards – all stored in folders and boxes arranged carefully along the apartment walls. As she moves around her apartment in a wheelchair she picks freely from her archive, each item bringing forth a story of where she was at the time and who she was with. “It is as if her memory has been turned inside out” writes Douwe Draaisma (2013, p. 30). “Everything she sees and takes out of the boxes has its own associations, so her memories are all around her.”

While we may not all have as impressive an archive of travel mementos as Mrs. de Rode, our memories too surround us. Like Mrs. de Rode, we know and “compose” ourselves through our memories. Who we are is intimately connected to memories of who we were. But memory is not something internal to us, and it has never been. Memory resides in our connections to the social and the material world. Individual memory is never truly individual; it is located within larger social frameworks that allow us to make sense of these memories (Halbwachs & Coser, 1992). At the same time, our memories – and thus our sense of self – are materialized in external memory supports. By posing for a photo, writing a love letter, or penning a diary entry, we are “composing the self” as José van Dijck (2004) puts it. Years later, when we rediscover that photo, love letter, or diary, we re-compose ourselves, through dialogical interaction with this externalized memory.

Increasingly, however, such quotidian practices of autobiographical memory are being embedded in, organized through, and generated by, “technological systems that systematically order memories according to their own logics” (Mitchell & Hansen, 2010, p. 65). The French philosopher Bernard Stiegler terms these technological systems “mnemotechnologies.” These systems often serve industries that are built around and through the organizing of our memories. While it is accepted that we increasingly compose our selves through networked technologies today, what is often overlooked is the role these technologies play in composing our selves *for* us.

Drawing on Stiegler’s work, in this chapter we take a closer look at a contemporary example of a mnemotechnology: Facebook’s “On This Day” feature. We will investigate how Facebook decides which memories to show individual users, and thus how the platform re-presents a version of the user’s self for them. We will then examine the role that “On This Day,” and memory in general, plays within the Facebook economy. This will be followed by a wider discussion on the potential implications of trusting our memories to mnemotechnologies. First, however, we will lay the groundwork by introducing Stiegler’s concepts of *mnemotechnic* and *mnemotechnology*.

## From Mnemotechnics to Mnemotechnologies

Bernard Stiegler’s work has been of growing influence to scholars of media (Mitchell & Hansen, 2010) and technology (Thomas, 2013; Kinsley, 2015). For Stiegler, technics – including everything from primitive tools, to systems of writing, to modern technology – are part and parcel of what it means to be human. Rejecting the standard opposition between culture and technology, or between “man and his tools,” Stiegler instead offers a *technogenetic* understanding of the human. Technogenesis, as N. Katherine Hayles (2012, p. 10) puts it, is “the idea that humans and technics have coevolved together.” From this perspective, there is no independent subject that predates or stands outside technology. Technology and the subject are always already engaged in a process of becoming.

This approach comes across most forcefully in Stiegler’s writings on memory. Stiegler builds his theory of experience and memory upon three degrees of retention. The first two he derives from the early twentieth-century phenomenologist Edmund Husserl. Husserl’s distinction between “primary” and “secondary” retention can best be described through the example of the musical melody. A melody is a temporal object that only exists in duration. To listen to a melody is to listen to a continuum of notes. However, each note only takes on meaning in relation to the notes that precede and follow it. Thus, for Husserl, listening to a melody is an example of primary retention as it involves perception. If tomorrow, though, the same melody suddenly comes to mind, one is now engaging in secondary retention. In distinguishing between primary and secondary retention, Husserl is therefore drawing a line between perception and imagination.

But this neat distinction falls apart for anyone who has ever listened to the same melody twice. On each repeated listen we perceive the song somewhat differently. The primary retention of the melody is modified by the secondary retention of previous listens. Perception and imagination, it seems, cannot be so easily counterpoised. What is more, as Stiegler points out in his writings on Husserl, the ability to listen to the exact same melody multiple times is made possible by the artifact of recorded sound. Building from what Husserl calls “consciousness of image,” Stiegler (2011, p. 20) thus introduces a third term: “tertiary retention.” Tertiary retention refers to the exteriorization of memory into technical objects. Unlike Husserl, for Stiegler the recording as an artifact of memory is not derivative of primary and secondary retention. For Stiegler, the reverse is true. Rather than perception making memory and the artifact possible, it is the artifact that makes possible both primary and secondary retention. As Ben Roberts (2006, pp. 58–59) explains “the record allows both the perception of the melody and, crucially, the constant modification of that perception through repeated auditions.”

Tertiary retention is thus constitutive of primary and secondary retention (Stiegler, 2010, p. 9). This point becomes more clear when we think about how photos of our youth shape both our perception of who we are in the present, and our imaginations of who we were. Tertiary retention precedes and awaits our birth into this world. “The finite, fragmentary, secondary memory of individual consciousness” as Patrick Crogan (2010, p. 142) puts it, “is always already supplemented by the external record accessible through all forms of objective ‘memory.’” Indeed, for Stiegler (2010, p. 67) “[h]uman memory is originally exteriorized,” by which he means that it is “technical from the start”: “[t]here is no interiority that precedes exteriorisation.”

There is nothing altogether new about tertiary retention. In one sense, the photograph or the recorded melody are simply minor characters in a long history of exteriorizing memory into technical objects. Since the late Paleolithic period, memory has been supported through what Stiegler calls “mnemotechnics.” Mnemotechnics, like cave paintings or the alphabet, are “tools that enable memory to be stored externally” (Fuggle, 2013, p. 194), or as Stiegler (2010, p. 67) puts it “conscious methods of memory storage.” However, Stiegler takes pains to point out the transformation of mnemotechnics over the course of the twentieth century. What he terms the “industrialization of memory” (2009, 2011) has introduced a new relation between primary, secondary and tertiary memory:

The 20th century is the century of the industrialization, the conservation and the transmission – that is, the selection – of memory. This industrialization becomes concretized in the generalization of the production of industrial temporal objects (phonograms, films, radio and television programs, etc), with the consequences to be drawn concerning the fact that millions, hundreds of millions of consciousnesses are every day the consciousnesses, at the same time of the same temporal objects. (1998, p. 106)

In the documentary described in the introduction, Mrs. de Rode sat wheelchairbound in her apartment, surrounded by boxes and files stuffed full of mnemotechnics — postcards, tickets, and photos of the many journeys she took in her long life. However, for some time now, such quotidian practices of autobiographical tertiary memory are being embedded in, organized through, and generated by what Stiegler terms “mnemotechnologies.” A mnemotechnology is “a technology that systematically orders memories” (2010, p. 67). Much of Stiegler’s work focuses on the historical transition from *mnemotechniques* to *mnemotechnologies* — “from individual exteriorizations of memory functions to large-scale technological systems or networks that organize memories” (2010, p. 67).

If Mrs. de Rode had decided that her collection of mementos was taking up too much space and she had begun the arduous task of scanning and saving all her postcards and photos onto a computer, Mrs. de Rode would — in Stiegler’s terms — be making the transition from mnemotechnique to mnemotechnology. In the process, she would discover that a mnemotechnology, such as a computer, not only stores memories but organizes memories, while generating new information about them. She might find that her photos have been reorganized alphabetically by the titles she gives them. She might wonder why she has 367 MB worth of photos from her trip to Turkey, while the photos from her holiday in Rome only take up 103 MB. Perhaps Mrs. de Rode would take little notice of these relatively uninteresting data points, but in digitizing and saving her photos to her computer her relationship to these memories has been subtly changed, embedded as they now are within a technological system that operates by its own logics.

For Stiegler, however, the transition from mnemotechniques to mnemotechnologies does not simply represent the ceding of control of what is “human” to the machine. It typically also represents a ceding of memories to an industry built around and through the design of these mnemotechnologies — “to *service industries* which can network them, control them, formalize them, model them, and perhaps destroy them” (Stiegler, n.d., para. 5). What if Mrs. de Rode had been a Facebook user all her life, posting albums and updates of her travels in real-time? This is a question we turn to below after we first explore in more detail a particular mnemotechnology — Facebook’s “On This Day” feature.

## “On This Day”

Facebook has long been interested in our memories. Applications and features such as Year in Review, Timeline Movie Maker, Lookback videos, Friends Day videos, and Friendship Anniversary videos are examples of Facebook’s concern with their users’

pasts (Konrad et al., 2016a, p. 29). 1 One of Facebook's more recent features is "On This Day". Launched on March 24, 2015, a year later, an average of sixty million users visited the On This Day page every day and 155 million people had opted to receive announcements from the application (D'Onfro, 2016, para. 4).

According to Facebook's Help Center FAQ, "On This Day shows you memories to look back on from that day in your Facebook history. Memories include things like your posts and others' posts you're tagged in, major life events and when you became friends with someone on Facebook" (On This Day, 2017). Memories, in Facebook's language, are therefore *mediated* memories, or – to be more precise – mediated memories shared on (and with) Facebook. Memory on Facebook is, in Stiegler's terminology, tertiary.

In the press release accompanying the official launch of On This Day, Facebook Product Manager Jonathan Gheller (2015) wrote: "People often look back at old photos and other memories they've shared on Facebook, and many have told us that they enjoy products and features that make this easier" (para. 1). The application has made looking back so easy that Facebook actually remembers for you. This is nothing new: all forms of tertiary retention – from writing to recorded audio – essentially remember *for* you. The issue here is that we are not dealing with "just" a conscious method of memory storage – a *mnemotechnique* – but with a technological *system* that *orders* memories: a *mnemotechnology*. Memories on Facebook are exteriorized within a particular technological system which organizes memory according to its own logic. While On This Day automatically re-presents past events to its user, this system, like Facebook's software in general, is black-boxed. In this section we first attempt to lift the lid of this box by investigating Facebook's endeavor to personalize memories through the interlinked processes of user experience research, machine learning, and user input.

Facebook continually tests On This Day through user experience (UX) research. According to Anna Howell, a Facebook UX research manager, Facebook needs to be "extremely caring and sensitive" with On This Day because of the complexities of memory (D'Onfro, 2016, para. 8). As a result, much effort was put into determining which kind of memories should be featured in On This Day. Through surveys, Facebook's research team concluded that the application "should provide occasional reminders of fun, interesting, and important life moments that one might not take the time to revisit" (as cited in D'Onfro, 2016, para. 10). Moreover, the team asked users from ethnically diverse backgrounds to rank themed memories ("vacation," "achievement," "food," etc.) in terms of how much they liked to be reminded of these memories. The researchers found that users did not like to be reminded of old posts about food, or those that included swear words or sexual content. Instead, they preferred posts that included words such as "miss" (D'Onfro, 2016, para. 12). An apparent contradiction thus underlies the development of On This Day: in order to personalize the feature, Facebook first needs to understand the typical, "average" user.

On This Day memories are personalized, however, in the sense that they are *your* memories, some of which are more meaningful to you than others. Facebook utilizes machine learning in order to “rank” memories in terms of their meaningfulness for individual users. The company has developed an AI model that tracks and learns from a user’s interaction with their On This Day application and combines this with demographic information and friendship status (Cohen, 2016, para. 10). This ranking also takes into account user preferences: posts shared in the past influence the surfacing of posts in the present. The more a user interacts with On This Day, the better this algorithm is able to determine which memories the user would like to see emerge on their feed. Determining how meaningful a memory is also requires Facebook’s image recognition software which is able to interpret visual content and distinguish between—for example—mountains and dogs, or any other elements within photographs (Cohen, 2016, para. 10; D’Onfro, 2016, para. 16).

Finally, since algorithms cannot function without input, Facebook allows a limited amount of user agency in determining which memories do, or do not, surface through On This Day. The company introduced filter options after many users complained about painful or inappropriate memories emerging on their news feeds. Users can visit the On This Day application in the menu to the left of their news feed and select three visibility options: On This Day can either show “all memories,” “highlights” (memories from top friends, the default setting), or “none” at all. Users are able to further filter memories by selecting date ranges and specific friends they would rather not see posts from, because, according to Facebook, “your memories are yours, so you should control which ones you see in On This Day” (On This Day, 2017). Memories are then re-presented to the user on his or her personal news feed in a specific message box. Why does Facebook want to connect you to your past? What is the purpose of On This Day from Facebook’s perspective? We will explore these questions below.

## **Making Facebook More Intimate: One Memory at a Time**

To generate profit from advertisers, Facebook seeks to maximize the amount of time its users spend on its service. Whether we conceive of Facebook as an “attention merchant” (Wu, 2016), as a rentier (Rigi & Prey, 2015), or as an exploiter of user labor (Fuchs, 2012), On This Day was developed by Facebook to improve the service’s “stickiness,” with this larger profit motive in mind. The application did not fall out of the sky, but is part of Facebook’s grander strategy to steer people into sharing more personal posts. According to reports from *The Information* and *Bloomberg* this type of sharing is declining quickly on Facebook and moving on to other platforms (Heath, 2016, para. 3). Facebook first started to experiment with On This Day as early as 2011, presumably to

keep users from switching to other social networking sites, to spend more time on Facebook, and to connect emotionally to the platform (Lafferty, 2013; Parr, 2011).

On This Day and similar applications that invite so-called “original” posting are developed by Facebook’s “Goodwill Team,” a group of engineers, designers, artists, and researchers whose goal it is to create a digital environment in which users are “moved to express their feelings and connect with things that matter” (Perez, 2017, para. 4). Nostalgia is an important conduit for building an emotional connection to things and research in business and marketing shows that “nostalgia is a significant motivating force on Facebook” (Davalos et al., 2015, p. 91):

Nostalgic posts are more thematic, deeper and more reflective than posts in general. General posts tend to focus on spur of the moment discussions of the day and wishing others well. Nostalgic posts focus on larger themes, such as the appreciation of life, life stories, family, romanticism, and music/dance. Phrases frequently used in nostalgic posts, such as years ago, high school, good times, down memory lane, and broke my heart, reveal a longing and reverie for the past. They are inherently emotional.

Additionally, nostalgic posts “contain more words, and . . . a higher percentage of these words reflect cognitive and affective processing than general posts” (Davalos et al., 2015, p. 90). In other words, shared On This Day posts are important for Facebook because they allow the platform to creep more deeply into the texture of our lives (van Dijck, 2013, p. 55). In turn, such posts more clearly reveal what and whom a user really cares about. This, of course, facilitates precise targeting opportunities for advertisers and allows Facebook to increase advertising rates. More specifically, the sharing of nostalgic content also allows Facebook and third-party advertising companies to segment and then target users with “nostalgia-based behavioral advertising campaigns,” which deliver a high return on investment (Davalos et al., 2015, p. 91).

At the same time, On This Day fulfills another function for Facebook: one which is less directly related to increasing the rates it charges its advertisers. Facebook is also deeply concerned with how people feel about Facebook, and with how its users think Facebook feels about them. Alongside standard metrics such as MAUs (Monthly Active Users), DAUs (Daily Active Users), and ARPUs (Average Revenue Per User), Facebook also tracks what it refers to internally as the CAU metric — “Cares About Us” (Weinberg & Efrati, 2016). The CAU is Facebook’s attempt to gauge how much people think Facebook cares about *them*.

Weinberg and Efrati (2016) report in *The Information* that Facebook began to closely track this metric around 2014 and that CEO Mark Zuckerberg has made it an increasing priority over the last few years. Sources told Weinberg and Efrati that Zuckerberg considers the effect of any new product on Facebook’s CAU metric. On This Day would appear to be a product that would help with this metric. The constant



surfacing of personal memories on Facebook makes the platform more intimate. UX researcher Anna Howell remarks that users of On This Day feel like, “Facebook is talking directly to me and giving me something that I want and I enjoy” (as cited in D’Onfro, 2016, para. 20). This intimacy is important if Facebook wants to give its users the impression that it cares about them as individuals. This is also reflected in a change in the wording of a typical “On This Day” notification. When the feature was first launched, a somewhat stark notification read “Rik, here’s a photo you posted exactly a year ago.” More recently, notifications were introduced – alongside cutesy childlike cartoons of puppies, ice cream, and baseballs – with “Rik, we care about you and the memories you share here. We thought you’d like to look back on this post from a year ago.”

We can understand the relationship between On This Day and Facebook’s CAU metric in terms of what Arvidsson (2008) calls “*philia*”: the affective quality of social connections that companies attempt to create between their consumers and their products. Having conducted their research before the development of On This Day, Davalos and colleagues (2015, p. 91) suggest that “social media websites may find it feasible to develop apps which curate individual user posts, reminding them about memories (linked to happy events like birthdays, festivals, family etc.), and thereby stoking warm bittersweet nostalgic emotions.” In this light, On This Day would appear to be one method to increase and enhance Facebook’s users’ *philia*, or their affective investment in the platform (Arvidsson & Colleoni, 2012).

For this same reason, the development of On This Day is firmly rooted in psychological and cognitive research into how memory relates to well-being. In this literature, “Technologically-Mediated Memory” (TMM) describes, according to Konrad and colleagues (2016b, p. 24), “any technology that . . . encodes, stores, and retrieves autobiographical information.” On This Day is a TMM system that facilitates “remembering autobiographical memories” and “enhance[s] this process by capturing rich records in the form of images, videos, or textual descriptions of past personal experiences.” According to this research, “[t]hese detailed records potentially allow more accurate and comprehensive reflection,” which, increases positive mood and overall well-being (Konrad et al., 2016b, p. 4).

These research findings are inscribed in Facebook’s memory applications and tools. For example, On This Day memories can be edited by users, who can choose which memories they want to share with their friends. According to Konrad and his colleagues (2016a, p. 23) “[t]his provides a chance for selective self-presentation, with the goal of achieving positive impressions, likeability, and social favor.” While this gives Facebook users some measure of control over the content that is produced and distributed across the web, it also provides Facebook with an “increasingly granular map of user desires” (Gehl, 2011, p. 1232). Along with making the environment in which users post more personal and intimate, the ability to filter and edit On This Day memories gives Facebook ever more robust personal data.

We have described how Facebook curates memories for individual users, and the role that “On This Day,” and memory in general, plays within the Facebook economy. However, what are the potential implications of trusting our memories to mnemotechnologies such as Facebook? We will now turn to an exploration of this question.

## Composing the Self 2.0

In line with popular discourse, much academic scholarship heralded the emergence of interactive “web 2.0” and participatory “new media” for its liberating, creative, and participatory dimensions. Memory scholars were generally no different. Memory links up very well with the web 2.0 logic – it is accessible not elitist, participatory, affective, and peer-to-peer (Garde-Hansen et al., 2009, pp. 8–9). The pervasiveness of networked, digital media was even thought to inaugurate a new type of memory: a “social network memory,” which is “fluid, de-territorialised, diffused and highly revocable, but also immediate, [and] accessible” (Hoskins, 2009, p. 41). Opposed to the “official” memory of archives, museums, and broadcast media, “vernacular” memory offered the potential to write your own pasts:

The boundaries between the official and the vernacular, the public and the private, the permanent and the evanescent will cease to matter, for all stories and images will be equally fit to represent and comment on the past. (Haskins, 2007, p. 405)

Stiegler too suggests in his earlier work that digital memory aids share more with writing than with broadcast media such as radio, television, and cinema. The internet, for Stiegler, is (potentially) “an associated hypomnesic milieu” where consumption is reunited with production, as “receivers are placed in a position of being senders” (Stiegler, n.d.). As Mark Hansen explains:

By renewing the possibility for self-expression, and hence for self-exteriorization, today’s digital hypomnemeta restore a positive dimension to our coevolution with technics. We might even say that they fuse mnemotechniques and mnemotechnologies, furnishing artificial supports for individual (and collective) memories that exist within and are nourished by a larger mnemotechnological milieu – the system of the Internet. (Mitchell & Hansen, 2010, p. 65)

In order to ground and assess these somewhat abstract claims, perhaps it is useful to compare a mnemotechnology like On This Day with an age-old mnemotechnique: the diary. In her work on diary writing, José van Dijck (2007) shows how people constitute

a sense of self when they trust their thoughts and feelings to paper (p. 55). This involves imagination and reflection, which, in turn, shapes subjective experience. By composing a travel diary, Mrs. de Rode is also composing herself. This is never a straightforward representation of the self: through the selection of events, effacement, and anticipation, Mrs. de Rode shapes what and how she will remember through her diary entries. Years later, upon flipping through her diary's pages, Mrs. de Rode re-enacts the chronological narrative she has developed about her travels, and in doing so, re-composes herself.

On This Day is part of Facebook's attempt to make its platform as intimate as a diary. The more we attach ourselves to Facebook, the more we share with the platform. The more we depend on Facebook to store our memories, the more intimate the platform feels. However, memories entrusted to On This Day are processed entirely differently from memories inscribed in a diary. The writer of the diary is also the reader, but more importantly, the encoder is also the decoder. While we may feel like we are "writing" to Facebook—in the form of text or images—we are actually adding data to the templates Facebook provides us with (Gehl, 2011, p. 1232). Likewise, while we may feel like we are "reading" memories resurfaced by On This Day, we are actually receiving them. Unlike in a diary, on Facebook encoding and decoding skills are delegated to software and to the algorithms that constitute features like On This Day. It is the software that does the "reading."

While a diarist records personal memories, On This Day personalizes memories. Like a diary, Facebook is certainly a platform through which we compose ourselves. But at the same time, we are composed through Facebook and its proprietary algorithms. To put it provocatively, by exposing ourselves to Facebook, the platform composes us. There is, therefore, an imbalance of power between user and technology. Not only does Facebook capitalize on the thoughts and feelings shared on the platform by means of targeted advertising, but also the company instrumentalizes memories so that Facebook becomes *part of* our life stories.

We are not implying that there is no escape from mnemotechnologies such as Facebook. Social media users might resist and "hack" these technologies (as some Facebook users have done with On This Day). What is more, we still generate and store most of our personal memories outside of social media. It would thus be alarmist to claim that features like On This Day alone could "cause our memories to pass into machines" (Stiegler, 2010, p. 30). Yet, On This Day is only one service, and it would be naive to claim that the wider apparatus of mnemotechnologies exerts no impact whatsoever on processes of retention.

The question of how social media platforms change processes of retention—how and what we choose to remember and what we choose to forget—is a question that cannot be answered definitively at this point. Following Socrates' famous claim, Stiegler (2010, p. 29) argues that "the exteriorization of memory is a loss of memory and knowledge." However, it is important to reiterate that our memories have not been

taken from us, or detached from us by social media platforms like Facebook. Memory is always already exterior to us. It is a part of our environment and the tools we use. If these tools change, so will the ways we retain and relate to our memories. What happened to all those phone numbers we knew by memory once we started using a mobile phone?

Features such as Facebook's On This Day also force us to re-evaluate how memory is implicated in the composition of the self. Do such mnemotechnologies change how we come to "know ourselves"? Following, Neal Thomas (2013) we could argue that On This Day:

stores and re-presents discourse in ways that increasingly displace subjects away from knowing themselves temporally through anamnesis – local and living memory – and towards knowing themselves through an exterior function of memory; one that, for platform makers, should somehow reconcile its semiotic affordances with the logic of surplus value.

Even more dramatically, Stiegler (2009, p. 81) argues: "There has today occurred a veritable inversion in the relation between life and media: the media now relates life each day with such force that this 'relation' seems not only to anticipate but ineluctably to precede, that is, to determine, life itself." This brings up another intriguing question: How might the pervasiveness of online tools of retention shape processes of *protention*? As both philosophers and neuroscientists point out, "memory is not only about the past, but is also about the future" (Ofengenden, 2014, p. 42). How do mnemotechnologies like Facebook influence how we conceive of, and act toward, the future?

"We have begun to organise how we address and perform activities according to how they can be captured using mnemotechnical systems" writes Samuel Kinsley (2015, p. 166). Internalizing the very logic of mnemotechnologies, we choose where to sit at a concert based on camera angles, which hotel to sleep in based on the quality of the Wi-Fi connection, and what to post on social media based on the "likes" we expect to generate. Long before Facebook's algorithms have decided which memories to surface, the platform has already subtly conditioned how each memory is given shape.

## Conclusion

Mrs. de Rode died in her apartment surrounded by mnemotechnics in the form of boxes and files filled with souvenirs, photos, and records of her many journeys. Until the end, Mrs. de Rode had full control over her archive of memories. What if she had been a Facebook user, posting albums and updates of her many travels? By uploaded these memories onto Facebook instead, Mrs. de Rode would have surrendered some degree

of control. Not only would Facebook choose which memory to surface at which time, the company would, for all practical purposes, own the representation of these memories. In this scenario, Mrs. de Rode's self would be shaped by a technology that systematically and automatically orders and represents her self for her. This, according to Stiegler (2010, p. 68), represents a displacement of memory; one that "renders our memory the *object* of knowledge-control."

In an article published in 1995, Jacques Derrida starts by describing the role of the archons, the superior magistrates whose houses functioned as the archives in Greek civilization. He writes: "The archons are first of all the documents' guardians. They do not only ensure the physical security of what is deposited and of the substrate. They are also accorded the hermeneutic right and competence. They have the power to interpret the archives" (Derrida, 1995, p. 10). This dual role of archons in safekeeping and interpreting of tertiary memory has gradually shifted, in the age of mnemotechnologies, to large data companies such as Facebook.

Certainly, Facebook attends to our "longing for memories; for capturing, storing, retrieving and ordering them" (Garde-Hansen et al., 2009, p. 5). What is more, as a platform premised on connectivity and "sharing," Facebook facilitates the circulation of individual and collective memories, and in turn "the creation of shared, collective knowledge across a diverse spectrum of lives" (Kinsley, 2015, p. 169). Yet at the same time social media platforms like Facebook are merely one example of what Kinsley (2015, p. 169) describes as "emerging industrial apparatuses for the capture, storage and transmission of memory." These apparatuses "place the potential for an extraordinary level of control over what is remembered (and) how it is remembered" (Kinsley, 2015, p. 169).

Ultimately at stake in an age of mnemotechnologies is *what* is remembered, *how* it is remembered, *how* it is re-presented to us, and, ultimately, what is *not* remembered for us – what is forgotten. Of course this is an ancient problem, inherent to tertiary and maybe all memory. Forgetting might even make memory possible, because incompleteness makes imaginative reconstruction in the present possible (Keightley & Pickering, 2012). However, through automated processes of personalization, On This Day "filters" our memories and re-presents those it deems worthy of our reflection. As much as the application remembers for us, it also forgets for us. This systematic forgetting, in turn, affects how we view ourselves in relation to networked others. Instead of a diary that allows for the composition of the self, Facebook – by means of applications such as On This Day – increasingly composes the self *for* us through continuous selection, effacement, and re-presentation of our memories.

As Artie Konrad, the psychologist involved in the development of On This Day has said in an interview: "The saying at Facebook is 'The journey is only 1 percent finished' . . . On This Day has so much potential and I'm excited about what's in store" (McNulty, 2016, para. 13). This journey is undertaken by users, each scroll, click, share, and "like" at a time, and might very well be redefining how we compose *ourselves* through and with digitally networked technology.

## Note

1 Artie Konrad, the lead author of this piece, is one of the psychologists involved in the development of On This Day.

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